

Luis Obispo County. It seems unlikely that the Indians dredged their specimens. Perhaps beach worn specimens and additional littoral collecting grounds not yet found by conchologists were their sources of supply. Except for the seven specimens from Marin County mounds, all are from mounds far removed from the habitat of the species. Either they were traded inland by coastal Indians or excursions were made to the coast by inhabitants of the interior.

In northwestern California *Olivella pycna* is fairly common in Indian necklaces, dress fringes, etc. Among examples in the University of California Museum of Anthropology are 1-1505 (necklace) from the Hupa Indians, and 1-2334 (fringed buckskin dress) from the Yurok, Karok, or Hupa Indians. *Olivella pycna* is usually used along with young *Olivella biplicata* of about the same size. Stearns describes a string of "probably over a thousand shells"² of *Olivella biplicata* and *Olivella intorta* from the Hupa Indians of Humboldt County. His so-called *intorta* is probably *pycna*. No doubt the beach at Crescent City was one source of supply of both species for the modern Indians.

Dr. S. Stillman Berry has checked our identification to the extent of asserting that ten archeological specimens from Santa Clara County and one live-collected shell from Crescent City sent to him "are *Olivella pycna* without any reasonable doubt."

FIRST RECORD OF *BARTLETTIA* IN PARAGUAY

BY ALBERTO CARCELLES

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The single species in the genus *Bartlettia* is *B. stefanensis* Moricand, from the Huallaga River, affluent of the Amazonas, in Ecuador. Dr. F. H. Schade sent to the Museo Argentino de Ciencias Naturales, twelve specimens collected in Arroyo Guazu, Paraguay.

Bartlettia lives in the waterfalls, incrusting in hard rocks ("tosea").

² Robert E. C. Stearns, Ethno-Conchology—A Study of Primitive Money, Report of the U. S. National Museum for the Year ending June 30, 1887, p. 326, 1889.

The family Aetheriidae consists of three genera: *Aetheria* Lam. from the Nile River with species in the Pleistocene of West Africa, a genus which resembles *Ostrea*, but with two adductors; *Acostea* D'Orb. of the Magdalena River, Colombia, also similar to *Ostrea* with one adductor; and *Bartlettia* Adams, from a tributary of the Amazonas, possessing two adductors, the anterior of which is the longer. The anterior area extends into the water, and the posterior area is hidden between the stones, resembling superficially *Anodontites tenebricosus*. In the opinion of Ihering, the fauna of the Paraguay River is related to that of the Amazonas, notably in the presence of Unionacea and fishes. The presence of *B. stefancensis* in Paraguay favors this thesis.

The shell is very irregular, subcircular, with the anterior area longer, twisted, and compressed, the posterior area broad, rounded, with the umbo-ventral zone straight, without hinge, the amphidetic ligament short, thick, and subinternal. The superior and inferior margins of the anterior zones are convergent, forming a little channel. The outer surface is irregular, resembling the bark of a tree, and is most irregular on the area of the shell exposed to erosion. External color greenish olive, inside greenish blue, and somewhat iridescent. The shell is free when young and adherent in the adult stage, the torsion being characteristic of the adult stage.

Measurements: a-p 10, u-v 5, thickness 2.5 mm. (youngest specimens, similar to *Anodontites tenebricosus*). A-p 81.4, u-v 38.5, thickness 32.2 mm. (adult stage), no. 19961, M.A.C.N.

This is the first record of *Bartlettia* in the drainage system of the Paraguay-Parana Rivers.

PINE WOODS AS ADEQUATE HABITAT TYPES FOR LAND MOLLUSCA

BY ALLAN F. ARCHER

Although comparatively little has been written on the subject of land mollusks in pine woods, what little we have in print testifies for the most part to the scarcity or absence of molluscan life in coniferous cover. It is gratifying to note the recent appearance of Henry van der Schalie's paper, "Larger Land Shells